



MIC Test Strip Technical Sheet *Mycobacterium tuberculosis*

Specimen

Respiratory (bronchial wash and sputum), wounds and sterile sites (tissue, pleural, peritoneal, joint fluid and CSF).

Medium	Middlebrook 7H11 + 10% OADC (Oleic acid, Albumin, Dextrose Complex).
Inoculum	Suspend 4-6 week old colonies in Middlebrook 7H9 broth + 0.5% Tween or 2% glycerol, vortex 3-5 min with glass beads, allow to settle for 20 min and adjust supernatant to 3-4 McFarland.
Pre-incubation	37 °C / 5-10% CO ₂ / 24 hours.
Application	Use 1 strip in each 90 mm plate, positioning the handle near the edge.
Incubation	37 °C / 5-10% CO ₂ / 5-10 days, depending on the isolate.
Reading precautions	Interpret the M.I.C. where the ellipse intersects the M.I.C. scale. Select the M.I.C. end point at significant inhibition of growth, ignore very light haze or scattered colonies.
Caution	All work must be performed according to safety precautions from CDC, Atlanta, USA: A Biosafety Cabinet Class IIA must be used.

	Quality Control Tentative QC (M.I.C. µg/mL)		INTERPRETATION M.I.C. Criteria (µg/mL)		Examples of ANTIBIOGRAM			
	<i>M. tuberculosis</i> ATCC® 27294	<i>M. tuberculosis</i> AW 388	S	R	90 mm petri dish	90 mm petri dish	90 mm petri dish	90 mm petri dish
EB ETHAMBUTOL	0.064-0.25	0.5-4	<7.5	≥7.5			✓	
ET ETHIONAMIDE	0.016-0.064	-	<10	≥10				
IZ ISONIAZIDE	0.016-0.064	4-16	<0.2	≥0.2				✓
K KANAMYCIN			<6	≥6				
OFX OFLOXACIN	0.25-1.0	-						
RD RIFAMPICIN	0.064-0.25	0.064-0.25	<1	≥1	✓ 0.016 - 256			
S STREPTOMYCIN	0.25-1.0	-	<2	≥2		✓ 0.016 - 256		

References

1. NCCLS. Antimycobacterial susceptibility testing of *M. tuberculosis*; tentative standard, M24-T, December 1995.
2. Inderlied et al. Antimicrobial agents and susceptibility tests: mycobacteria, Manual of Clinical Microbiology, 7th edition, ASM, 1999.

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